

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1-49 (Canceled).

50. (Currently Amended) An isolated nucleic acid molecule comprising ~~a~~ an avian gut specific gene expression controlling region that ~~hybridizes under moderate stringency conditions to a nucleic acid molecule having the nucleotide sequence of SEQ ID NO: 1,~~ comprises a nucleotide sequence having at least 75% identity ~~with~~ to SEQ ID NO: ~~2~~ 1 or its complement.

51-52. (Canceled)

53. (Currently Amended) The isolated nucleic acid of Claim 50 wherein the gene expression controlling region comprises a sequence having at least 90% identity to SEQ ID NO: ~~2~~ 1 or its complement.

54. (Currently Amended) The isolated nucleic acid of Claim ~~53~~ 50 wherein the gene expression controlling region comprises a sequence having at least 95% identity to SEQ ID NO: ~~2~~ 1 or its complement.

55. (Currently Amended) The isolated nucleic acid of Claim ~~54~~ 50 wherein the gene expression controlling region comprises a sequence having at least 99% identity to SEQ ID NO: ~~2~~ 1 or its complement.

56. (Currently Amended) The isolated nucleic acid of Claim 50 wherein the gene expression controlling region comprises the sequence of SEQ ID NO: ~~2~~ 1 or its complement.

57. (Canceled)

58. (Currently Amended) The isolated nucleic acid of Claim ~~4~~ 50 wherein the gene expression controlling region comprises a sequence having at least 75% identity to SEQ ID NO: ~~1~~ 2 or its complement.

59. (Currently Amended) The isolated nucleic acid molecule of Claim ~~58~~ 50 wherein the gene expression controlling region comprises a sequence having at least 95% identity to SEQ ID NO: ~~1~~ 2 or its complement.

60. (Currently Amended) The isolated nucleic acid molecule of Claim ~~59~~ 50 wherein the gene expression controlling region comprises a sequence having at least 99% identity to SEQ ID NO: ~~1~~ 2 or its complement.

61. (Previously Added) The isolated nucleic acid of Claim 50 wherein the gene expression controlling region comprises the sequence SEQ ID NO: ~~1~~ 2 or its complement.

62. (Canceled)

63-65. (Canceled)

66. (Currently Amended) ~~The recombinant nucleic acid molecule of Claim 63, wherein the gut-specific~~ A gene expression controlling region comprises a nucleotide sequence that hybridizes under moderate stringency conditions to a nucleic acid molecule having the nucleotide sequence of SEQ ID NO: 1 or its complement ~~and having at least 75% identity with the nucleotide sequence according to SEQ ID NO: 2.~~

67-68 (Canceled)

69. (Currently Amended) The gene expression controlling region ~~recombinant nucleic acid molecule of Claim 66~~ 63, further comprising a polyadenylation signal sequence ~~operably linked to~~

the insert encoding a polypeptide.

70. (Currently Amended) The gene expression controlling region ~~recombinant nucleic acid~~ molecule of Claim 69 wherein the polyadenylation signal sequence is derived from the SV40 virus.

71. (Currently Amended) The gene expression controlling region ~~recombinant nucleic acid~~ molecule of Claim ~~63~~ 87 wherein the ~~nucleic acid insert~~ nucleotide sequence encoding a polypeptide has a codon complement optimized for protein expression in an avian.

72. (Currently Amended) The gene expression controlling region ~~recombinant nucleic acid~~ molecule of Claim ~~63~~ 73 ~~further~~ comprising an origin of replication selected from the group consisting of a bacterial origin of replication ~~or~~ and a viral origin of replication.

73. (Currently Amended) The gene expression controlling region ~~recombinant nucleic acid~~ molecule of Claim ~~63~~ 66 ~~wherein the recombinant nucleic acid molecule is~~ further comprising a vector plasmid.

74. (Currently Amended) The gene expression controlling region ~~recombinant nucleic acid~~ molecule of Claim ~~63~~ 73 wherein the vector ~~recombinant nucleic acid molecule~~ is a virus.

75. (Currently Amended) The gene expression controlling region ~~recombinant nucleic acid~~ molecule of Claim ~~63~~ 73 wherein the ~~recombinant nucleic acid molecule is~~ vector is an expression vector.

76. (Canceled)

77. (Currently Amended) A method of expressing a ~~heterologous~~ polypeptide in a host cell comprising the steps of:

introducing into a eukaryotic cell a ~~recombinant nucleic acid molecule according to claim 63~~

a gene expression controlling region comprising a nucleotide sequence that hybridizes under moderate stringency conditions to a nucleic acid molecule having the nucleotide sequence of SEQ ID NO: 1 or its complement operably linked to a nucleotide sequence encoding a polypeptide; and
maintaining the ~~transfected~~ eukaryotic cell under conditions suitable for expression of the heterologous polypeptide under the control of the ~~avian-gut-specific~~ gene expression control region encoded by the recombinant nucleic acid molecule.

78. (Currently Amended) A eukaryotic cell ~~transformed with the~~ comprising an expression vector ~~according to Claim 75, or a progeny cell thereof, which includes a gene expression controlling region comprising a nucleotide sequence that hybridizes under moderate stringency conditions to a nucleic acid molecule having the nucleotide sequence of SEQ ID NO: 1 or its complement, operably linked to a nucleotide sequence encoding a polypeptide wherein the cell or the progeny thereof expresses the heterologous polypeptide.~~

79. (Previously Added) The eukaryotic cell of Claim 78 wherein the cell is an avian cell.

80. (Previously Added) The eukaryotic cell of Claim 78 wherein the cell is a chicken cell.

81. (Previously Added) The eukaryotic cell of Claim 78 wherein the cell is a cultured cell.

82. (Canceled)

83. (Currently Amended) The eukaryotic cell of Claim 78 wherein the ~~nucleic acid insert~~ nucleotide sequence encoding a polypeptide has a codon complement optimized for protein expression in an avian.

84-86. (Canceled)

87. (New) The gene expression controlling region of Claim 66 further comprising a

nucleotide sequence encoding a polypeptide.

88. (New) An isolated nucleic acid molecule comprising a gene expression controlling region comprising a nucleotide sequence having at least 75% identity to SEQ ID NO: 2 or its complement.

89. (New) The isolated nucleic acid of Claim 88 wherein the gene expression controlling region comprises a sequence having at least 90% identity to SEQ ID NO: 2.

90. (New) The isolated nucleic acid of Claim 88 wherein the gene expression controlling region comprises a sequence having at least 95% identity to SEQ ID NO: 2.

91. (New) The isolated nucleic acid of Claim 88 wherein the gene expression controlling region comprises a sequence having at least 99% identity to SEQ ID NO: 2.

92. (New) The isolated nucleic acid of Claim 88 wherein the gene expression controlling region comprises the sequence of SEQ ID NO: 2.

93. (New) A gene expression controlling region comprising a nucleotide sequence that hybridizes under moderate stringency conditions to a nucleic acid molecule having the nucleotide sequence of SEQ ID NO: 2 or its complement.

94. (New) The gene expression controlling region of Claim 93 further comprising a nucleotide sequence encoding a polypeptide.

95. (New) The gene expression controlling region of Claim 94 wherein the nucleotide sequence encoding a polypeptide has a codon complement optimized for protein expression in an avian.

96. (New) The gene expression controlling region of Claim 93 further comprising a polyadenylation signal sequence.

97. (New) The gene expression controlling region of Claim 96 wherein the polyadenylation signal sequence is derived from the SV40 virus.

98. (New) The gene expression controlling region of Claim 93 wherein the recombinant nucleic acid molecule comprises a vector.

99. (New) The gene expression controlling region of Claim 98 wherein the vector is a virus.

100. (New) The gene expression controlling region of Claim 98 wherein the vector is an expression vector.

101. (New) The gene expression controlling region of Claim 98 comprising an origin of replication selected from the group consisting of a bacterial origin of replication and a viral origin of replication.

102. (New) A method of expressing a polypeptide in a host cell comprising:
introducing into a eukaryotic cell a gene expression controlling region comprising a nucleotide sequence that hybridizes under moderate stringency conditions to a nucleic acid molecule having the nucleotide sequence of SEQ ID NO: 2 or its complement operably linked to a nucleotide sequence encoding a polypeptide; and

maintaining the eukaryotic cell under conditions suitable for expression of the polypeptide under the control of the gene expression control region.

103. (New) A eukaryotic cell comprising an expression vector which includes a gene expression controlling region comprising a nucleotide sequence that hybridizes under moderate stringency conditions to a nucleic acid molecule having the nucleotide sequence of SEQ ID NO: 2 or

its complement, operably linked to a nucleotide sequence encoding a polypeptide.

104. (New) The eukaryotic cell of Claim 103 wherein the cell is an avian cell.

105. (New) The eukaryotic cell of Claim 103 wherein the cell is a chicken cell.

106. (New) The eukaryotic cell of Claim 103 wherein the cell is a cultured cell.

107. (New) The eukaryotic cell of Claim 103 wherein the nucleotide sequence encoding a polypeptide has a codon complement optimized for protein expression in an avian.